

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

12/19/2005

Patent Department Mitsubishi Electric Research Laboratories, Inc. 201 Broadway Cambridge, MA 02139 EXAMINER

GESESSE, TILAHUN

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 12/19/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,625	04/21/2004	Neelesh B. Mehta	MERL-1565	5829

TITLE OF INVENTION: MULTIPLE ANTENNAS AT TRANSMITTERS AND RECEIVERS TO ACHIEVING HIGHER DIVERSITY AND DATA RATES IN MIMO SYSTEMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	03/20/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450

or Fax

(571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed when
appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address
appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for
maintenance fee notifications.

indicated unless corrected t maintenance fee notification	below or directed otherwise is.	in Block 1, by (a)	ders and notif) specifying a	fication of mainten new corresponder	ancè fees wance address;	vill be mailed to the current and/or (b) indicating a sep	correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Fee(s) Trai	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must			
	590 12/19/2005			have its ov	vn certificate	e of mailing or transmission.		
Patent Departmer Mitsubishi Electric 201 Broadway Cambridge, MA 02	Research Laboratories	, Inc.		I hereby constants Positive States Positive addressed transmitted	ertify that th	tificate of Mailing or Tran its Fee(s) Transmittal is beir with sufficient postage for fi I Stop ISSUE FEE addres: TO (571) 273-2885, on the	smission ng deposited with the United rst class mail in an envelope s above, or being facsimile date indicated below.	
Cambriage, wire of	.137						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED	INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/828,625	04/21/2004		Neelesh E	3. Mehta		MERL-1565	5829	
TITLE OF INVENTION: N SYSTEMS	MULTIPLE ANTENNAS A	T TRANSMITTE	RS AND REG	CEIVERS TO AC	HIEVING F	IIGHER DIVERSITY AND	DATA RATES IN MIMO	
APPLN. TYPE	SMALL ENTITY	ISSUE FI	EE .	PUBLICATIO	N FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1400	í	\$300		\$1700	03/20/2006	
EXAM	EXAMINER		IT	CLASS-SUBC	LASS]		
GESESSE,	TILAHUN	2684		455-1010	00			
1. Change of correspondence	e address or indication of "F	ee Address" (37	2. For prin	ting on the patent f	ront page, li	st		
CFR 1.363).	dence address (or Change of	Correspondence	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,					
Address form PTO/SB/12	22) attached.		(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to					
"Fee Address" indicate PTO/SB/47; Rev 03-02 (Number is required.	tion (or "Fee Address" Indica or more recent) attached. Use	ation form e of a Customer	2 registere	attorney or agent) d patent attorneys of name will be printed	or agents. If	no name is 3		
	RESIDENCE DATA TO B							
PLEASE NOTE: Unless recordation as set forth in	an assignee is identified be 37 CFR 3.11. Completion	clow, no assignee of this form is NO	data will appe Γa substitute i	ear on the patent. for filing an assign	If an assign ment.	nee is identified below, the	document has been filed for	
(A) NAME OF ASSIGN	EE	(B) RESIDENC	E: (CITY and STA	TE OR CO	UNTRY)		
N					Da		Пс	
lease check the appropriate 4a. The following fee(s) are			. Payment of		idual 🗀 C	orporation or other private g	roup entity Government	
Issue Fee	enciosed.	70	•	A check in the amount of the fee(s) is enclosed.				
Publication Fee (No small entity discount permitted)			Payment by credit card. Form PTO-2038 is attached.					
Advance Order - # of Copies			The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
_	(from status indicated above							
	MALL ENTITY status. See					LL ENTITY status. See 37 (
The Director of the USPTO NOTE: The Issue Fee and P nterest as shown by the reco	is requested to apply the Issuublication Fee (if required) vords of the United States Pate	ie Fee and Publicat vill not be accepted ent and Trademark	ion Fee (if an I from anyone Office.	y) or to re-apply a other than the app	ny previousi licant; a reg	y paid issue fee to the applic istered attorney or agent; or	cation identified above. the assignee or other party in	
Authorized Signature					Date			
Typed or printed name			Registration No.					
This collection of information application. Confidential submitting the completed appropriate the completed appropriate the completed appropriate the completed appropriate the complete th	on is required by 37 CFR 1.3 ity is governed by 35 U.S.C opplication form to the USPT	11. The informatio 122 and 37 CFR O. Time will vary	n is required to 1.14. This collaboration depending up	to obtain or retain a lection is estimated oon the individual	benefit by to take 12 case. Any co	the public which is to file (a minutes to complete, includ omments on the amount of the complete of the comple	and by the USPTO to process) ing gathering, preparing, and time you require to complete	

this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Bos. 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,625	04/21/2004	Neelesh B, Mehta	MERL-1565	5829
75	90 12/19/2005		EXAM	INER
Patent Departmen			GESESSE,	TILAHUN
Mitsubishi Electric 201 Broadway	Research Laboratories, Inc.		ART UNIT	PAPER NUMBER
Cambridge, MA 02139			2684	
		•	DATE MAILED: 12/19/200	5

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 94 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 94 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.